



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

| APPLICATION NO. | FILING DATE | FIRST NAMED INVENTOR | ATTORNEY DOCKET NO. | CONFIRMATION NO. |
|-----------------|-------------|----------------------|---------------------|------------------|
|-----------------|-------------|----------------------|---------------------|------------------|

09/829,665

04/10/2001

Mark A. Richmond

203445

1864

23460

7590

03/24/2004

LEYDIG VOIT & MAYER, LTD
TWO PRUDENTIAL PLAZA, SUITE 4900
180 NORTH STETSON AVENUE
CHICAGO, IL 60601-6780

EXAMINER

ABRAMS, NEIL

ART UNIT

PAPER NUMBER

2839

DATE MAILED: 03/24/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

| | | | |
|------------------------------|--------------------------------------|--|--|
| Office Action Summary | Application No. 09/829,665 | Applicant(s) RICHMOND ET AL. | |
| | Examiner Neil Abrams | Art Unit 2839 | |

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 12-03-03
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-123 is/are pending in the application.
- 4a) Of the above claim(s) 1-123 is/are withdrawn ~~from consideration~~ 48-75, 88, 90-123
- 5) ☒ Claim(s) 8-14 is/are allowed.
- 6) ☒ Claim(s) 1-7, 15-47, 77-83, 84-87, 76, 89 is/are rejected.
- 7) ☐ Claim(s) is/are objected to.
- 8) ☐ Claim(s) are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. .
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|---|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413) Paper No(s)/Mail Date. <u> </u> |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08) Paper No(s)/Mail Date <u> </u> 3 sheets | 6) <input type="checkbox"/> Other: <u> </u> |

Non-elected claims should be cancelled in next response.

Abstract objected to lines 7-end could be deleted and replaced by the following or equivalent; “the system includes matching orientation indicia on the polarization keys (220, 270) and housing windows (254) for viewing the indicia. A coupler (290) is slidably mounted on the plug assembly and include cam slots for causing mating and retraction of the plug (204) and receptacle (202) and also includes open position and engaged position indicator strips (2320, 2330, 2340). The system may include grounding springs (216, 218, 1916, 1918) for engaging a mounting panel and may be used with various type of backshells (2800, 2900, 3100, 3200, 3300) including shield wire termination types.”

Such or similar sentences keyed to fig. Would aid in clear disclosure of the invention. New abstract on separate page required.

Claims 15-39 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Claim 15, “the receptacle and the plug” lack antecedent basis.

Claim 25 third connector limitation lacks tie in relationship to other features.

Claims 1-7 and 76 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Marin alone or in view of Thompson.

Marin, fig. 1, discloses a system with polarity members 22, housing 10, 12, indicia 28 and housing windows 30. Claim 2, male and female shown at 26, 24. For claim 3, obvious to use Thompson hexagonal shaped keys. Claim 6, obvious to form use Marin with plural keys 22 on each housing. This plugs to be used for plural circuits.

Claims 1-7 and 76 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Germany 2433729 in view of Marin Thompson and Barnhart.

Germany includes plug and socket with polarizing members and housing that appear to include windows at 12, 13, the polarizing parts appearing as male and female. Should issues arise, since details not clear also obvious to use windows in view of Marin at 30 and to use hexagonal shapes in view of Thompson and to use plural keys on each connector in view of Barnhart. Plural keys enable greater number of polarization combinations.

Claims 15-47 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over LeGallic alone or in view of Capp, Bailey, Noyes, Barnhart, Miller, Afshar, Mello and Brodie.

For claims 15, 40 Legallic discloses first and second connectors 3, 2 (fig. 9) with cam followers 32, cam 7 and polarizing members 5, 1, are adjustable in position. LeGallic adequate for claims 15, 16, 19. For claims 17, 18 obvious to use ground springs in view of Capp and Noyes or to use Noyes spring with Capp herz dots. These would provide safety grounding of the assembly.

Art Unit: 2839

For claims 19, 20 25, etc obvious to form LeGallic with flanges and optionally with dual inserts, the keys located between inserts as in Barnhart (Flange 6, keys 52) or between holes on the flanges (single insert) and to form some of the flange with slots as in Bailey, the slots being read as slots at one end and as holes at the other end.

Obvious that cam member and follower could be used with either such type system.

Also obvious to mount Barnhart flange type connectors from either side of panel (claim 29) or to use mounting rails as in Afshar (claim 32, 47) or to use mounting clip as per Miller or Bailey at 16 (claim 30, 46).

For claims 32-39 also obvious to use backshells in view of Mello and Broadie for strain relief and for termination of shield ~~wires~~^{wires} if any. For claims 44, 45, either mounting direction readable as front or rear mounting (push from front or push to front).

Claims 77-83 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Tsukakoshi alone or taken in view of Hanazaki.

For claim 77, Tsukakoshi, fig. 1 include receptacle 21, plug 12, cam 30, wall surface 12a, the cam operable to join 21 and 12, the wall having an opening on the surface over groove 15, through which ~~pin~~^{pin} 24 would be exposed on full mating.

For claim 83, also obvious to include detents in view of Tsukakoshi at 54, 55 for locking to coupler in position.

Claims 84-87 are rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over Aoki.

Art Unit: 2839

Note receptacle 11, plug 15, cam 12, followers 16, cam arms 12b, with ribs (strips) 14, 14, the strip ends near 12a being visible in open position, hidden in closed position. Also see col. 7, lines 27-30.

For claims 86, 87, see Aoki, figs. 6, 7 should issues arise, recited features considered obvious variations. As alternative, also obvious to use marks (arrows) on arms 3b, 12b (figs. 2, 6) to indicated starting position. Fig. 2 edge at 3b seems to provide position indicator (detent) that would be hidden when coupler moved.

Claim 89 is rejected under 35 U.S.C. 102(b) as anticipated by or, in the alternative, under 35 U.S.C. 103(a) as obvious over LeGallic.

See above discussion of LeGallic device. Should issues arise, also obvious to use the device as recited in the claim.

Claims 8-14 are allowed.

Any inquiry concerning this communication should be directed to Abrams Neil at telephone number (571)272-2089.

N. Abrams/ds

03/11/04


NEIL ABRAMS
EXAMINER
ART UNIT 322